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A plea is frequently made by lovers or amateur students of plants for the use of so-called common (or vernacular) names for our species. Sometimes it is voiced also by secondary school teachers of botany, and last year it was included in one of the official reports of this Academy. The writer has received a number of written and verbal complaints aimed at the use of scientific names only, in papers treating of the plants of our state, and every other botanist in the state undoubtedly has had similar experience.

In view of these circumstances it seems worth while to note some of the difficulties which lie in the way of the general use of common names.

No question can successfully be raised against the use of scientific names where accurate designation is demanded. This is especially true in scientific records, and in the naming of plants which possess special properties or qualities making them of value for medicinal, industrial, or other special purposes.

Scientific names possess two great advantages: *First,* they are universal. Botanists of all countries recognize them, and employ them consistently. No matter in what language a scientific botanical paper is written, the plants are designated by scientific names which will be recognized everywhere, at least by systematic botanists.

Second, they are accurate and specific. Even in those cases in which, for various reasons, several scientific names have been applied to the same species the botanist has little difficulty in determining the identity of the species; and the cases in which the same scientific name has been applied to more than one species are so few that they cause but little trouble, and even here the use of the author's name practically removes all doubt.

Common names possess neither of these qualities. From the very circumstance that they are vernacular, there must be at least as many groups of them as there are languages. The common names in one language can mean nothing to people using another, and there would be the same objection to the acceptance of the common names from another language that is made now to the use of the Latinized scientific name. If, then, common names

were generally used it would make communication concerning botanical subjects between different countries very difficult, and botany is a subject too broad and of too general interest to be thus hampered.

The demand for the use of common names has been made in all countries and in all languages having a scientific literature, and botanists have usually made an effort to assist those who made the demand by including common names in their descriptive works. Sometimes the result has been rather absurd, as in the case of Dr. Rostafinski's monograph on the Slimemoulds.[1]

In this elaborate and strictly scientific work the author includes "common names," mostly coined by himself, for all the species. Being a loyal Pole, and writing his work in his native tongue, he, of course, uses *Polish* common names, and the "dibliks," "mavoreks," etc., of this author would hardly be more satisfying to the average American than are the scientific names now in use. If, on the other hand, American botanists should coin their own names for these forms, — most of which are common to Europe and America, — the result would be just about as satisfying to the Pole, — and not much more so to the American! The absurdity of the use of common names in such cases is made manifest when we consider that the vast majority of people in any country could not recognize the various more or less obscure species even under the group name "Slimemoulds," or its equivalent, and the designation of these obscure forms by common names could serve no purpose.

A still stronger objection to common names arises from their lack of accuracy and definiteness. The following cases will serve for illustration:

1. Many of the names as commonly used are group names which may be applied to any one of several species, such as Spanish needles, sedges, goldenrods, willows, etc. The attempt to differentiate species by a common name in many of these groups seems scarcely worth while since even experienced botanists often hesitate to determine the species. This is true of most of the cryptogams, and applies quite as well to the more difficult groups of flowering plants, such as the sedges, hawthorns, and others. It would be just as useless to apply common names to the species of these groups as it would be to apply them to all the fossils, to the various species of plant-lice, or to the species of other more or less obscure or difficult groups. Manifestly records and designations made with such indefinite names would have little value.

[1] Rostafinski, Dr. J. T., Monografia Śluzowce; 1875.

2. The same common name is so often applied to different species, even in the same locality, that the application in any particular case leaves one in doubt as to the species intended. A "jack-oak" may be any oak, especially of the black-oak group, for which the user has no other name; the "nut-pine" may be any one of a dozen or more species; the "blue-bell" may be a *Polemonium,* a *Mertensia,* or a *Campanula*; the "crocus" may be a true *Crocus,* but it is quite as likely to be *Anemone patens* var., or *Trillium nivale*; the "cow-slip" may be a *Caltha,* or a *Dodecatheon*; the "honey-suckle" may be a *Lonicera,* an *Azalea,* or an *Aquilegia*; "Indian-tobacco" is *Lobelia inflata* to the pharmacist, but any species of *Antennaria* to almost everyone else; "beggar's-lice" may include almost anything from a *Lappula* or *Cynoglossum* to *Sanicula, Circaea,* and *Agrimonia,* if only the fruit is a little bur, and in the east it may mean a *Bidens*; the "horse-weed" may be *Ambrosia trifida, Erigeron canadense,* or *Iva xanthiifolia*; "dog-fennel" is a *Maruta* in the north, and a *Helenium* in the south; the "adder's-tongue" in one locality is an *Erythronium,* and in another an *Ophioglossum*; the "Christmas-fern" to some is a *Lygodium* and to others a *Polystichum*; and so on through a long list.

The claim that the common name is "easier" than the scientific name does not always hold true. Few people hesitate to designate some of our cultivated plants by such names as Chrysanthemum, Gladiolus, Zinnia, Amaryllis, Narcissus, Asparagus, Spiraea, Catalpa, Salvia, Canna, Begonia, Cosmos, Dahlia, Crocus, etc., and certain native or cultivated plants by such names as Verbena, Phlox, Hydrangea, Anemone, Aster, Clematis, Yucca, Hepatica, Lobelia, Iris, Oxalis, Sassafras, Trillium, etc., yet every one of these names is the scientific name of a genus, and there are many more like them. In a few cases even the scientific specific name is used as a common name, as in the case of oleander (*Nerium oleander*); Japonica (*Cydonia japonica*); and calamus (*Acorus calamus*).

In many cases the common name is but a slight modification of the scientific name, either by the addition of a qualifying adjective, or by a slight change in spelling, as illustrated by the following cases: sweet alyssum (*Alyssum*); perennial phlox (*Phlox*); showy orchis (*Orchis*); gentian (*Gentiana*); rose (*Rosa*); tulip (*Tulipa*); lily (*Lilium*); lupine (*Lupinus*); saxifrage (*Saxifraga*); peony (*Paeonia*); and many others.

Not infrequently, moreover, the scientific name of one species

is used as the common name for another. Thus, the name "syringa" is commonly applied to the mock-orange (*Philadelphus coronaria*), but it is the generic name of the lilac; "smilax" is applied to a hothouse *Asparagus,* but it is the generic name of sarsaparilla and the greenbrier; "geranium" is really the spotted cranesbill of our woods, and not the cultivated *Pelargonium* known by that name; "nasturtium" is a *Tropaeolum,* but it was formerly the generic name of insignificant plants belonging to the mustard family, now known as *Radicula;* the name "calla" is properly applied to a small native swamp species rather than to the cultivated calla-lily, which is a *Richardia*; etc. Surely it would be no more difficult to use these names correctly than it is to apply them erroneously!

Botanists have made repeated efforts to establish common names by including them in descriptive manuals, but in the great majority of cases they have not been accepted generally, and locally the manuals have been criticised for giving the wrong common name "because it did not conform to the local usage!" Despite all that botanical authors have attempted in the direction of fixing common names, to many people the columbine is still a "honey-suckle," some species of Asparagus are "ferns," and many names are hopelessly confused in common usage. The botanist can scarcely be justly criticised for turning to the scientific name for accurate designation when his own efforts to standardize common names receive such scant attention.

The use of common names will continue, but those who use them should join in some effort at standardization. In the great majority of cases it would probably be best to recognize the common names which have appeared in edition after edition of our descriptive manuals. In many cases, however, it would be better to employ the generic name as the common name. Thus in the sedge family (*Cyperaceae*) it scarcely seems worth while to apply common names to all the species (as has been done in one of the recent manuals) since they are usually so difficult to distinguish, but it would make for greater accuracy if the names of the genera, as *Cyperus, Scirpus, Carex, Eleocharis,* etc., should be adopted as common names of the plants in the several groups. A similar use of generic names could be made in many other cases, especially in the larger families, such as the *Leguminosae, Labiatae, Scrophulariaceae, Compositae,* etc.

To bring about this standardization of common names will require the combined efforts of all who are interested. It is evi-

dent that the botanists alone cannot do this, for they have been trying it for a long time — and moreover, the scientific names meet all their wants; it is equally evident that it is not possible to accept all the local common names. This effort must be made in a systematic manner in connection with a more general study of our local floras, both scientific and amateur. Two ways of reaching this result are here suggested:

1. Restore systematic plant study in our high schools. The indoor "laboratory methods" employed in recent years in our secondary schools have failed to develop that deep interest in the living world about us which is of so much importance in scientific work, and which is indispensable in worth-while amateur efforts. The old-time botany, with all its faults (which were no greater than these of modern teaching, and most of which could be eliminated by the proper preparation of teachers), brought our young people in more direct contact with the living world, and gave them something which they could carry into ordinary life without the handicap of laboratory equipment.

This kind of work would present an excellent opportunity for the more general use of standardized common names.

2. Encourage the amateur study of local plants by members of existing organizations, or by societies organized for the purpose, in much the manner in which the Audubon societies have carried on the study of birds. If necessary, organize Asa Gray clubs, or encourage such study in connection with the conservation efforts which are now being made by so many organizations. Teach our young people to study our local plants without destroying them. Many of the old-time students of birds thought it necessary to kill the bird to be studied, but today greater interest is taken in the study of the living bird. So, many who consider themselves students and lovers of plants destroy them; they should be taught that greater satisfaction comes from the study and enjoyment of plants which are left undisturbed for repeated observations.

The greater interest in, and knowledge of, plants resulting from such organized effort will make it necessary to employ recognized common names more freely, making the knowledge of them more general, and their use consequently more accurate and more consistent.

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